

## **A STUDY ON PROFIT AND PROFITABILITY OF SELECT URBAN CO-OPERATIVE BANKS IN COASTAL ANDHRA REGION OF ANDHRA PRADESH**

**K. SUDHAKARA RAO**

Lecturer, Department of Commerce, Sri A S N M Government College, Palakol, West Godavari, Andhra Pradesh, India

### **ABSTRACT**

This is a fact finding and comparative study of Urban Co-operative Banks' operational efficiency through the select indicators like Profit and Profitability. While 'Profit' refers to excess of total income over total expenditure, 'profitability' refers to ability of a given investment to earn return from its use. For this purpose it has divided into two Sections. In Section-I an analysis of profit is made by taking five indicators, viz., total income, total expenditure, spread, burden and net profit. In Section-II analysis of profitability is attempted by taking three ratios – spread ratio, burden ratio and profit ratio. In this study profit and profitability of select Urban Co-operative Banks (8) in Coastal Andhra region of Andhra Pradesh over a period of 10 years (i.e. from 2003-04 to 2012-13) are examined. It is hoped that the present research study relating to UCBs in Coastal Andhra will be a gap filling one and useful addition to the existing literature on the subject.

**KEYWORDS:** Burden, Expenditure, Income, Profit, Profitability, Spread

### **INTRODUCTION**

The co-operative banking structure in India can be broadly classified as agricultural credit and non-agricultural credit. The credit structure is both pyramidal and federal in character. As far as agricultural credit is concerned, there are two streams one for short and medium term credit and another for long-term credit. The non-agricultural credit has three-tier structure, with the Primary Non-Agricultural Credit Societies, Salary Earners Societies, the Urban Co-operative Banks etc., at the town level, the Central Co-operative Banks at the middle level and the State Co-operative Bank at the apex level. Besides, there are a few Central Industrial Banks operating at the district level which normally look to the State Co-operative Bank or the State Industrial Co-operative Bank for additional resources.

The need for Urban Co-operative Banks (UCBs) arises from the fact that joint-stock banks are not interested in providing credit to the urban middle class. This is because it is not advantageous for joint-stock banks in developing the business of small loans on account of high cost of advancing and recovering them. As a result, the man with limited means in urban areas would be driven to money lenders or similar agencies to obtain loans at exorbitant rate of interest. Thus, the urban co-operative credit movement started in India with the chief object of catering to the banking and credit requirements of the urban middle classes such as small traders, businessmen, the artisans, factory workers and the salaried people with limited fixed income in urban or semi-urban areas. Besides protecting the middle classes and men of modest means from the clutches of the money-lenders the movement is also expected to inculcate the habit of thrift and savings amongst them. The movement has provided the frugal sections of the community an opportunity of investing their savings and thus has enabled the hard-pressed people to tide over the period of stress and strain.

Profit and profitability play the same role in a bank as blood and pulse in human body. Without these, growth, expansion and even survival become difficult in long run. So, profit and profitability are, therefore, the nerve-knot of a bank and without it the existence of the bank is like a body without the backbone. Without profit and ability to earn sufficient profit, it is difficult to survive on the part of banking operations. Profit maximization is the aim of every business. Hence, profit earning indicates the efficiency of a bank, greater the volume of profit more efficient of the business. 'Profit' is the result of revenue function and cost function. The excess of revenue over the expenditure forms the profit. Thus, 'profit' can be defined as the difference between total income and total expenditure.

The word 'profitability' is composed of two words 'profit' and 'ability'. 'Ability' refers to the earning capacity or power of a bank to earn the profit. So, 'profitability' may be defined as the ability of a given investment to earn a return from its use. Profitability of a concern indicates the financial stability and greater the possibility of profit earning, the easier it is to attract capital investment. The height of profitability depends upon the ability of the management to deal intelligently and effectively to tide over risk and uncertainties through shifting them or hedging benefits. Profitability of different concerns varies as it depends upon type of business, risk involved, policy decisions etc.

## REVIEW OF LITERATURE

Several studies – both individual and institutional – have been carried out on co-operation in general and urban co-operative banks in particular. A number of committees and commissions appointed by the RBI, Central and State Governments have submitted their reports on UCBs incorporating therein several invaluable suggestions to improve the functioning of the UCBs in India. The first and foremost study with regard to urban co-operatives has been made by MacLagan Committee (1915) on Co-operation. The development of urban co-operative societies did not receive much attention until 1915 when the MacLagan Committee referred to the potentialities for the organization of such societies as a means of training the upper and middle classes in ordinary banking principles.

The failure of local joint-stock banks in the country at that time gave an impetus to the growth of urban co-operative credit societies. It was felt by the committee that urban credit societies were eminently suitable institutional agencies for collecting local savings and to provide relief to those who were in the clutches of money lenders by providing them with financial accommodation.

The Central Banking Enquiry Committee (1931) recommended that limited liability co-operative societies generally known as urban banks, should be established where necessary facilities and conditions exist, for the benefit of lower and middle classes of population. The UCBs are considered to be special societies meant for salary earners and they are looked upon as thrift societies for collecting and investing the savings of their members. It was envisaged that these urban banks should be to try to do for the small trader, the small merchant and the middle – class population what the commercial banks are doing for the big trader and big merchant.

The RBI appointed a High Power Committee (1999) under the chairmanship of K. Madhava Rao, to review the performance of UCBs and suggest necessary measures to strengthen this sector. The committee has recommended that the existing quantitative criteria of viability standards should be dispensed with and they should be replaced by qualitative norms like CRAR, tolerance limit of NPAs and operational efficiency; EPNs for UCBs should be on par with peer groups like Local Area Banks (LABs) and Regional Rural Banks (RRBs) whose clientele and area of operation are broadly similar to UCBs.

The Committee also feels that the existing low EPNs is one of the major causes for weakness of UCBs; irrespective of the size of the operations, UCBs need to run on professional lines; RBI should extend to the UCBs the same freedom and discipline as is applicable to commercial banks in opening branches; institutional mechanisms like State Level Rehabilitation Review Committee (SLRRC) and Bank Level Rehabilitation Review Committee (BLRRC) to review the performance of weak banks, the progress has not been quite satisfactory.

The Expert Committee (2011) constituted by the RBI on Licensing of Urban Cooperative Banks under the Chairmanship of Sri. Y H, Malegam. The Committee submitted its report with many observations as well as very valuable recommendations. Reserve Bank followed liberal licensing policy between May 1993 and March 1999. However, many UCBs licensed during this period became financially weak.

In the Annual Policy Statement for 2004-05, RBI announced licensing discontinuance and entered in to MOU with State Governments for co-ordination of regulatory policies and the setting up of TAFCUBs has resulted in a significant improvement in the health of the UCB sector. Since then, there has been considerable improvement in the functioning of UCBs.

## **SIGNIFICANCE OF THE STUDY**

The foregoing review of literature indicates that several official and non-official studies have been carried out from time to time on the working of UCBs. These studies are either macro in nature covering the entire country or confined to a few areas or few aspects of UCBs. In a vast country like India with varied resources base and socio-economic conditions, there is a need for more micro level and area – specific studies to evaluate the performance of UCBs in a particular region and to throw light on the problems faced by these banks in their operations. Coastal Andhra region of Andhra Pradesh has been selected for the purposes of the present study due to its geographic, demographic and economic importance.

## **OBJECTIVES OF THE STUDY**

The specific objectives of the study are:

- To study the profits of sample UCBs;
- To analyze the income and expenditure pattern of select UCBs;
- To examine the profit earning capacity of sample UCBs; and
- To suggest various measures for improving the performance of the banks;

## **HYPOTHESES**

Based on the above objectives the following hypotheses are postulated for testing.

**H<sub>01</sub>:** Inter-bank and inter-period variations with regard to total income are not significant.

**H<sub>02</sub>:** The year-wise and the bank-wise differences in the total expenditure under study period are not significant.

**H<sub>03</sub>:** There is no significant growth in profit of select UCBs.

**H<sub>04</sub>:** Profitability across select UCBs does not vary significantly.

## RESEARCH METHODOLOGY

### Sources of Data

The study is based on secondary data. The data relating to UCBs in Coastal Andhra region are collected from the annual reports of these banks. Besides this, discussions and consultations have also been held with the officials of these banks after preliminary analysis of data collected. Apart from these, data have also been collected from the publications of various institutions like Reserve Bank of India, Government of India, Bureau of Economics and Statistics and Registrar of Co-operatives of Government of Andhra Pradesh. Also published and unpublished reports, theses and individual works on the subject have been consulted.

### Sample Frame

UCBs in Coastal Andhra region of Andhra Pradesh constitute the universe for the purpose of the study. Coastal Andhra region comprises nine districts, viz., Nellore, Prakasam, Guntur, Krishna, West Godavari, East Godavari, Visakhapatnam, Vizianagaram and Srikakulam. As on 31<sup>st</sup> March, 2013 there were 37 UCBs spread over nine district of the region. Out of these 37 banks, 8 oldest UCBs, representing one from each of the eight districts of Coastal Andhra (Srikakulam Bank excluded for the sample due to the newly established bank) has been selected as sample for detailed analysis. All these eight UCBs have been in existence for more than 60 years.

Thus, the sample banks for the study are; The Nellore Co-operative Urban Bank Ltd., Nellore; The Ongole Co-operative Bank Ltd., Ongole; The Guntur Co-operative Urban Bank Ltd., Guntur; The Durga Co-operative Urban Bank Ltd., Vijayawada; The Bhimavaram Co-operative Urban Bank Ltd., Bhimavaram; The Aryapuram Co-operative Urban Bank Ltd., Rajahmundry; The Visakhapatnam Co-operative Bank Ltd., Visakhapatnam; and The Vizianagaram Co-operative Urban Bank Ltd., Vizianagaram.

### Tools of Analysis

The data collected from different sources are properly classified, tabulated and analyzed using appropriate statistical tools to draw meaningful conclusions. Simple statistical tools like linear growth rates and analysis of variance with F distribution are used for analysis and interpretation of data at appropriate places because of the values in each bank are normally distributed and the period of each bank should be equal.

## ANALYSIS AND FINDINGS

Coastal Andhra comprising nine districts is geographically and demographically important region of the state of Andhra Pradesh accounting for 33.75 per cent of total area and 40.39 per cent of total population of the state as per 2011 census. Urban co-operative movement made significant progress in this region.

### PROFIT ANALYSIS

While calculating profit in banks, actual interest costs and other costs are deducted from total earnings. In other words, profit is excess of total income of banks over total expenditure during a period. Profit refers to the absolute quantum of profits and is not always the sole index of finding efficiency of a bank. Profit does not reveal the reason, how it takes and relationship of one figure with another one.

### Total Income

The growth of income depends upon the bank's policy in the utilization of cash and deposits and also on the operations of the bank. The bank gets income from interests on loans and advances and investments and other income which includes locker rent, commission, brokerage and the like. Total income of all banks shown increase trend. The highest percentage of increase in total income during the study period was observed in Visakhapatnam Bank and lowest increase was noticed in Ongole Bank. The linear growth rates (Table 2) for total income of sample banks varied between 17.41 per cent (Vizianagaram bank) and 26.72 per cent (Vishakhapatnam Bank). Growth rates for all banks are significant at 1 per cent level.

**Table 1: ANOVA- Total Income of Select UCBs**

Sources of Variation	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-Value
Between banks	7	9109072	1301296.00	14.163
Between years	9	8086092	898454.70	9.788
Error	63	5788440	91880.00	--
<b>Total</b>	<b>79</b>	<b>27983604</b>	<b>--</b>	<b>--</b>

**Source:** Calculated from Banks' Profit & Loss A/C

The Table 1 shows that there is significant difference between years and between banks with regard to total income. The corresponding of F-values indicates that the variations are highly significant. The calculated values of F are more than the table values at 1 per cent level of significance. The first hypothesis is rejected. Hence, the mean total income is not the same for the eight UCB and between years also differ with respect to mean total income.

### Interest on Loans and Advances

Interest on loans and advances is a major component of total income of UCBs. Interest on loans and advances showed an increasing trend in selected banks. While Ongole Bank registered lowest overall rise in its income from interest on advances, Visakhapatnam Bank witnessed highest overall rise in this respect. Linear growth rate (Table 2) for income from interest on loans and advances was highest for Visakhapatnam Bank (25.72 per cent) and lowest for Ongole Bank (15.72 per cent). Linear growth rates of all banks are statistically significant.

### Interest on Investments

UCBs essentially being purveyors of credit to persons with small means, they are permitted to invest their surplus funds in Government and other approved trusteeship securities, fixed and other deposits of co-operatives and other financial agencies. Another major component of total income of banks is interest on investments. Interest on investments of sample banks witnessed an increasing trend during the study period. Overall growth in interest on investments was highest in Guntur Bank and lowest in Vizianagaram Bank. The linear growth rates for interest on investments for all sample banks are found to be statistically significant at 1 per cent level.

### Other Income

Other income of UCBs includes discounts, commission, exchange, brokerage, subsidies, income from non banking assets and profits from sale or dealing with such assets and other receipts. All sample banks (except Guntur) exhibited rising trend in other income. While Visakhapatnam Bank registered highest linear growth rate of 27.84 per cent, Vizianagaram recorded lowest linear growth rate of 7.47 per cent with respect to other income. Linear growth rates for

other income for remaining 5 other banks varied between 8.1 per cent and 20.97 per cent. Guntur Bank recorded a negative growth rate of 50.64 per cent. Growth rates of all banks (except Guntur) are significant.

**Table 2: Linear Growth Rates of Composition of Income**

Name of the UCB	Interest on Loans	Interest on Investments	Other Income	Total Income
Nellore	22.46**	26.87**	20.97**	23.37**
Ongole	15.72**	27.45**	8.10**	19.72**
Guntur	18.37**	30.05**	-50.64 <sup>NS</sup>	19.04**
Durga	21.69**	24.02**	18.58*	22.23**
Bhimavaram	21.61**	22.24**	18.50**	21.77**
Aryapuram	18.94**	28.25**	21.98**	21.98**
Visakhapatnam	25.72**	28.07**	27.84**	26.72**
Vizianagaram	18.05**	18.39**	7.47**	17.41**

\*\* : Significant at 1 % level

NS: Not significant at 5% level

Source: Calculated from Banks' Profit & Loss A/C

### Total Expenditure

The growth of expenditure depends to a large extent, on the stage and operations of the banks. If the bank is old and well established, the expenditure does not vary much. If the operations are stable, the expenditure also remains stable. Total expenditure includes interest on deposits and borrowings, salaries, allowances, provident fund and gratuity of employees, directors' fees and allowances, rent, rates, taxes, insurance, law charges, depreciation, stationery, etc. Interest on deposits and establishment expenses constitute major portion of total expenses of UCBs.

Total expenditure of all sample banks showed an increasing trend during the study period. Visakhapatnam witnessed higher overall rise in total expenditure followed by Nellore Bank and Aryapuram Bank during ten year period under study. While Visakhapatnam Bank registered highest linear growth rate of 26.42 per cent. Table 7 reveals that Vizianagaram Bank had lowest growth rate of 17.59 per cent in total expenditure. The linear growth rates for expenditure for all other banks ranged between 19.67 and 22.98 per cent. The growth rates for all banks are significant at 1% level.

**Table 3: ANOVA- Total Expenditure of Select UCBs**

Sources of Variation	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-Value
Between banks	7	7646548	1092364.00	15.332
Between years	9	6914059	768228.80	10.783
Error	63	4488428	71244.89	--
<b>Total</b>	<b>79</b>	<b>19049035</b>	<b>--</b>	<b>--</b>

Source: Calculated from Banks' Profit & Loss A/C

Table 3 shows that the computed values of F are greater than the table value of F at 1 per cent level of significance, hence, the difference in the total expenditure of the sample banks and the year wise difference in the total expenditure of all eight UCBs in Coastal Andhra under the study are significant. It can be concluded that trends in total expenditure and its components of select banks are statistically significant. Hence, the second hypothesis that the year-wise and the bank-wise differences in the total expenditure under study period are not significant stands rejected.

### Interest on Deposits

To increase profitability one way is to increase income and another is to reduce losses and expenses. The interest

on deposits is also an expense of the bank which increases or decreases with every increase or decrease in the deposits and their interest rates. It is the most important constituent of total expenditure. Annual growth of interest on deposits varied from bank to bank during the study period. The overall increase in interest on deposits was highest for Visakhapatnam Bank and lowest for Nellore Bank. Visakhapatnam Bank recorded highest linear growth for interest on deposits (27.53 per cent) and Nellore Bank recorded lowest growth rate (17.85 per cent). The growth rates for all banks in respect of interest on deposits are statistically significant.

### Establishment Expenses

Establishment expenses, also known as administration expenses, include salaries, director's allowances, rent, taxes, electricity, stationary and printing, audit fees, etc. Salaries of employees form major proportion of establishment expenses. Establishment expenses constituted another major component of total expenses. An increasing trend is observed with regard to this factor in all banks during the study period. The linear growth rate for establishment expenses was highest at 20.39 per cent in Visakhapatnam Bank followed by Bhimavaram (18.17 per cent), Guntur (16.46 per cent), Ongole (15.73 per cent) and Aryapuram (14.11 per cent) banks. Linear growth rates are low for Nellore (9.88 per cent) and Durga (9.92 per cent) banks. Growth rates for all banks are significant.

### Other Expenses

Other expenses of UCBs include depreciation, repairs to property, loss from sale or dealing with non-banking assets, contingencies, etc. There is an increasing trend in other expenses in all banks with inter-period variations. The linear growth rates for other expenses varied between 17.96 (Guntur Bank) and 37.69 per cent (Nellore Bank). Linear growth rates are significant in all banks (except Ongole and Vizianagaram Banks) are significant.

### Spread

The difference between interest earned and interest paid is called spread in banking terminology. Spread is amount available for banks for meeting their administrative, operative and other expenses. As a matter of practice, every bank try to increase the spread volume so that it is sufficiently available to meet the non-interest expenses and the remainder contribute to the profit volume. Proper management and deployment of funds and assets available to banks is of great importance to enhance the spread volume. Among the sample banks Nellore registered highest linear growth rate (28.7 per cent) in spread followed by Visakhapatnam (24.93 per cent), Aryapuram (23.65 per cent), Bhimavaram (20.51 per cent) and Guntur (19.84 per cent) banks. Compared to these five banks with the other banks (Ongole, Durga and Vizianagaram) had lower linear growth rates ranging from 10.93 to 14.9 per cent. The linear growth rates for spread in all banks are significant.

**Table 4: ANOVA – Spread of Select UCBs**

Sources of Variation	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-Value
Between banks	7	689995.50	98570.79	12.854
Between years	9	56775.12	62752.79	8.183
Error	63	483114.75	7668.49	--
<b>Total</b>	<b>79</b>	<b>1737885.38</b>	<b>--</b>	<b>--</b>

**Source:** Calculated from Banks' Profit & Loss A/C

The results of Analysis of Variance show that there are significant variations with regard to spread volume

between banks as well as between years as revealed 'F' – values. ANOVA test revealed that variations among banks and between years in respect of spread are significant.

### Burden

Burden is a difference between non-interest expenses (establishment and other expenses) and non-interest income. It represents non-interest expenses which are not covered by non-interest income and remain to be covered by spread so as to arrive at net profit. Thus, profit is difference between spread and burden. If burden is more, it adversely affects profit and vice-versa. Therefore, banks always have tried to maintain burden at the minimum so as to get higher profit. In the entire banks burden showed an increasing trend.

The linear growth rate for burden was highest in Nellore Bank (28.46 per cent) followed by Guntur (22.83 per cent), and Visakhapatnam (22.42 per cent) banks. For all the banks LGR for burden varied between 12.88 per cent (Durga Bank) and 19.02 per cent (Aryapuram Bank). The growth rates are significant.

**Table 5: ANOVA – Burden of Select UCBs**

Sources of Variation	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-Value
Between banks	7	289377.44	41339.63	18.914
Between years	9	284847.44	31649.71	14.48
Error	63	137698.44	2185.69	--
<b>Total</b>	<b>79</b>	<b>711923.31</b>	<b>--</b>	<b>--</b>

**Source:** Calculated from Banks' Profit & Loss A/C

The results of Analysis of Variance technique show that there are significant variations between banks and between years with regards to volume of burden as indicated by the corresponding F- values. ANOVA results indicated inter-bank and inter-period variations in burden are significant.

### Net Profit

Net profit is excess of total income over total expenses of the bank. In other words it is the difference between spread and burden. Data relating to profit of sample banks reveal inter-bank and inter-period variations. While Visakhapatnam Bank registered highest increase in profit. Durga Bank had lowest increase. Nellore, Ongole, Aryapuram and Vizianagaram Banks have incurred losses in some years of study period. The linear growth rates for profit are observed to be significant only in case of three banks (Bhimavaram, Nellore and Visakhapatnam) and for the remaining five banks (Ongole, Guntur, Durga, Aryapuram and Vizianagaram) the growth rates are not significant.

**Table 6: ANOVA – Net Profit of Select UCBs**

Sources of Variation	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-Value
Between banks	7	127617.80	18231.11	7.192**
Between years	9	49557.08	5506.34	2.172*
Error	63	159706.48	2535.02	--
<b>Total</b>	<b>79</b>	<b>336881.38</b>	<b>--</b>	<b>--</b>

\*\* : Significant at 1 % level

\* : Significant at 5% level

**Source:** Calculated from Banks' Profit & Loss A/C

Table 6 shows that there are significant variations between years and between banks with regard to net profit as

indicated by the corresponding F-values. ANOVA test revealed that inter-bank and inter-period variations as regards profit are statistically significant.

**Table 7: Linear Growth Rates of Composition of Expenditure and Net Profit**

Name of the UCB	Interest on Deposits	Establishment Expenses	Other Expenses	Total Expenditure	Spread	Burden	Net Profit
Nellore	17.85**	9.88**	37.69**	22.98**	28.70**	28.46**	30.91**
Ongole	23.56**	15.73**	22.90 <sup>NS</sup>	21.23**	10.93**	18.09**	230.14 <sup>NS</sup>
Guntur	20.79**	16.46**	17.96**	19.67**	19.84**	22.83**	13.19 <sup>NS</sup>
Durga	26.12**	9.92**	27.50*	22.80**	13.23**	12.88**	6.91 <sup>NS</sup>
Bhimavaram	22.35**	18.17**	21.65**	21.65**	20.51**	19.58**	23.08**
Aryapuram	20.76**	14.11**	23.50**	20.99**	23.65**	19.02**	66.86 <sup>NS</sup>
Visakhapatnam	27.53**	20.39**	25.32**	26.42**	24.93**	22.42**	28.78**
Vizianagaram	19.24**	11.45**	21.49 <sup>NS</sup>	17.59**	14.90**	15.53**	5.07 <sup>NS</sup>

\*\* : Significant at 1 % level

\* : Significant at 5% level

NS: Not significant at 5% level

Source: Calculated from Banks' Profit & Loss A/C

Taking into consideration growth rates in profit of sample banks, the third hypothesis that the growth in profit of select UCBs is not significant, is accepted in the case of five sample UCBs (Ongole, Guntur, Durga, Aryapuram and Vizianagaram) and rejected in respect of three sample UCBs (Nellore, Bhimavaram and Visakhapatnam).

## PROFITABILITY ANALYSIS

Measurement of profitability to ascertain the real efficiency and performance of a bank is of utmost importance. In order to measure profitability in banks, we should relate profit to acceptable factors. In other words, profitability can be judged by expressing profit as a percentage of total income, as a percentage of total deposits, as a percentage of working capital and as a percentage of total assets. For measuring performance of UCBs in terms of profitability three ratios have been used, viz., spread ratio, burden ratio and profitability ratio

### Spread Ratio

Spread ratio is an important indicator of profitability of banks. Spread ratio is computed by expressing spread as percentage of working capital of sample banks. The average spread ratio of all sample banks for the study period varied between 3.22 per cent in Vizianagaram Bank and 7.96 per cent in Nellore Bank. Bank-wise analysis indicates that Guntur Bank recorded highest ratio of 15.15 per cent and Aryapuram Bank registered lowest rate of 0.78 per cent.

**Table 8: ANOVA – Spread Ratio of Select UCBs**

Sources of Variation	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-Value
Between banks	7	224.77	32.11	8.519**
Between years	9	7.81	0.87	0.230 <sup>NS</sup>
Error	63	237.47	3.77	--
Total	79	470.05	--	--

\*\* : Significant at 1 % level

NS: Not significant at 5% level

Source: Calculated from Banks' Records

It is observed from the results of ANOVA technique that there are significant variations between banks with regard to spread ratio as indicated by 'F' value (8.519). Inter-period variations are not statistically significant.

### Burden Ratio

Burden ratio is another indicator of profitability. As burden ratio increases profitability decreases. Hence, for management of burden is highly essential for enhancing profitability of banks. Burden ratio (burden as a percentage to working capital) for the sample banks during the study period reveals that average burden ratio is lowest in Visakhapatnam (2.8 per cent) followed by Vizianagaram (2.98 per cent), Bhimavaram (3.11 per cent) and Ongole (3.29 per cent) banks. Nellore, Durga and Guntur banks have higher burden ratio of 7.26, 5.09 and 4.69 per cent respectively.

**Table 9: ANOVA – Burden Ratio of Select UCBs**

Sources of Variation	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-Value
Between banks	7	161.66	23.09	12.581**
Between years	9	3.98	0.44	0.241 <sup>NS</sup>
Error	63	115.64	1.84	--
<b>Total</b>	<b>79</b>	<b>281.29</b>	<b>--</b>	<b>--</b>

\*\* : Significant at 1 % level

NS: Not significant at 5 % level

Source: Calculated from Banks' Records

ANOVA results indicate that inter-bank variations with regard to burden ratio are significant. But inter-period variations are not significant.

### Profit Ratio

Profit ratio is the most important ratio required to judge the performance of UCBs, because absolute profit can be increased by employing more resources but without improving the profitability. The ratio analysis of profitability is not only highly important to the management to measure the efficiency of the bank but also it is required by different interested parties like share holders, depositors, etc., to know the return, growth, repayment capacity, etc. Profit ratio (profit to working capital ratio) in sample UCBs indicates that Guntur Bank had highest average ratio of 2.35 per cent followed by Visakhapatnam Bank (1.41 per cent) and Bhimavaram Bank (1.06 per cent). For all other banks average profit ratio ranged between 0.08 per cent (Aryapuram Bank) and 0.86 per cent (Durga Bank).

**Table 10: ANOVA –Profit Ratio of Select UCBs**

Sources of Variation	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-Value
Between banks	7	38.77	5.54	3.021**
Between years	9	8.49	0.94	0.514 <sup>NS</sup>
Error	63	115.56	1.83	--
<b>Total</b>	<b>79</b>	<b>162.78</b>	<b>--</b>	<b>--</b>

\*\* : Significant at 1 % level

NS: Not significant at 5% level

Source: Calculated from Banks' Records

Table 10 indicates between banks variations as regards profit ratio is statistically significant (at 1 per cent level) but between years variations are not significant.

ANOVA results indicate that inter-bank variations with regard to spread ratio, burden ratio, and profit ratio are statistically significant. Hence, the fourth hypothesis that profitability across select UCBs does not vary significantly stands rejected. We can conclude that Guntur and Visakhapatnam Banks are used the working capital in more effective manner than the remaining six UCBs.

## CONCLUSIONS AND SUGGESTIONS

The foregoing analysis of trends in total income, total expenditure, spread and burden reveals that the corresponding linear growth rates are significant in all sample banks. However, it is observed that linear growth rates for trends in profit are statistically significant only for three banks (Nellore, Bhimavaram, and Visakhapatnam) and for the remaining five banks the growth rates are not significant. Based on the analysis the following inferences are drawn with regard to performance of sample banks. Visakhapatnam Bank occupied the top position with regard to most of the variables, followed by Guntur, Bhimavaram and Durga banks. The performance of Nellore, Ongole and Aryapuram banks with regard to different parameters is mediocre. Vizianagaram Bank is lagging behind in all respects

The following suggestions are made to create public confidence and strengthen the urban co-operative banking sector in Coastal Andhra as well as in Andhra Pradesh.

- Profitability of banks depends, inter alia, on reduction of costs, recovery of overdue, work reorganization and development of cost consciousness. Establishment expenses play a key role in determined level of profit. Therefore, attention should be paid on staffing pattern, increasing volume of business per bank and per employee.
- Lending operations have to be directed to area which would maximize profitability and growth consistent with the long term objectives of the bank.
- While opening a new UCB or its branch preference should be given to under-banked and unbanked areas.
- Every year 3 newly elected directors should be on the Board of Directors of an UCB.
- There is also a need to select Chief Executives of the UCBs by an independent panel. Persons with suitable banking experience or relevant professional background should be considered for appointment as Chief Executive of the bank.
- To keep people informed of the achievements of UCBs, annual reports should be published disclosing every material fact like bad debts, doubtful debts and losses arising out of any transactions. This enables to judge the financial health of the concerned UCB.

## REFERENCES

1. Dr. Gurcharan Singh and Sukhmani (2011) "An Analytical Study Of Productivity and Profitability of District Central Cooperative Banks In Punjab", Journal on Banking Financial services and Insurance Research, Vol. 1 Issue 3 (June2011), pp. 128-142.
2. Dr. Mrs. Ratna and K. Nimbalkar (2011) "A Study of NPA"s -Reference to Urban Co-operative Bank", Golden Research Thoughts, Vol.1, Issue.VI Dec 2011.
3. Dr. Vilas Bhikaji Khandare (2012) "Some Issues In Customers Services Of Urban Co-operative banks: A Case Study Of Beed District", International Journal of Social Science & Interdisciplinary Research Vol.1 Issue 10, October 2012, pp. 145 - 155
4. Government of A.P., Department of Co-operatives (2002). "Report of the expert committee to review the functioning of urban co-operative banks in A.P." Hyderabad.

5. Government of India (1931). "Report of the Central Banking Enquiry Committee", New Delhi.
6. James Jacob. (2012). "Corporate Governance in Urban Co-operative Banks – The New Mantra for Greater Efficiency and Customer Satisfaction". *The Indian Journal of Commerce* Vol. 65, pp. 128-133.
7. Jawahar Babu, K.V.S.N and Muniraja Selkhar, B. (2012). "The Emerging Urban Co-operative Banks (UCBs) in India: Problems and Prospects". *Journal of Business and Management (IOSRJBM)* Vol. 2, No. 5, pp. 01-05
8. Reserve Bank of India. (1957). "Report of the committee on co-operation in India (Maclagan Committee)" 1915, Bombay.
9. Reserve Bank of India. (1992). "Report of the committee on licensing of new urban co-operative banks (Marathe Committee)", Bombay.
10. Reserve Bank of India. (1999). "Report of the High Power Committee on Urban Co-operative Banks (Madhava Rao Committee)", Mumbai.
11. Reserve Bank of India. (2011). "Report of the expert committee on licensing of new urban co-operative banks", Mumbai.
12. The Aryapuram Co-operative Urban Bank Ltd., "Annual Reports and Records", Rajahmundry.
13. The Bhimavaram Co-operative Urban Bank Ltd., "Annual Reports and Records", Bhimavaram.
14. The Durga Co-operative Urban Bank Ltd., "Annual Reports and Records", Vijayawada.
15. The Guntur Co-operative Urban Bank Ltd., "Annual Reports and Records", Guntur.
16. The Nellore Co-operative Urban Bank Ltd., "Annual Reports and Records", Nellore.
17. The Ongole Co-operative Bank Ltd., "Annual Reports and Records", Ongole.
18. The Visakhapatnam Co-operative Bank Ltd., "Annual Reports and Records", Visakhapatnam.
19. The Vizianagaram Co-operative Urban Bank Ltd., "Annual Reports and Records", Vizianagaram.
20. Vidya Pitre. (2013). "Urban cooperative banks: issues and prospects", *Economics and Political Weekly*, April, 2013, pp. 1505-1516.
21. [www.rbi.org.in](http://www.rbi.org.in)
22. [www.banknetindia.com](http://www.banknetindia.com)